Guest Editor's Introduction

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The premiere issue of *IEEE Computer Graphics and Applications* contained a review of graphic display technologies,* which indicated the current dominance of directed-beam refresh and direct-view storage tube displays in computer-aided design and drafting. This dominance is reflected in three articles in this issue, which describe in-house graphic design and documentation applications developed by Western Electric, Lawrence Livermore National Laboratory, and IBM. These applications are in operation today and were initiated in the mid-to-late 1970's; thus, they predate the current strong interest in color raster displays. Merging the high interactivity of directed-beam refresh technology and the greater information content of DVST technology with the greater flexibility of raster-scan is a challenge for the 1980's.

Vendor turnkey graphic systems sometimes provide a cheaper or quicker alternative to the development of an in-house graphic application. The many factors to be considered in selecting and implementing such a system are described in the fourth article in this issue; its authors draw on their own experiences at the Ford Motor Company.

The fifth article, more theoretical in nature, illustrates the principal analysis techniques of computational geometry as applied to the generalized line-polygon clipping problem. The solution to this problem is fundamental not only to geometric design but also to any application which wishes to "clip" data to some arbitrary viewport or screen boundary.

It has been a pleasure to serve as guest editor for this second issue of *IEEE Computer Graphics and Applications*. I look forward to the future issues of this journal and to the continued growth of the computer graphics field, which its inception signifies.

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